

AMENDMENTS TO CLAIMS

This listing of claims will replace all prior versions, and listing, of claims in the application:

Listing of claims:

1. (Currently amended) An image sensor having a plurality of pixels, each pixel comprising:

a photocell which receives light and generates an analog signal corresponding to a quantity of the received light;

a latch type comparator which compares the analog signal of the photocell and an analog signal of a photocell of an adjacent pixel and generates a digital signal having a value of the compared result; and

a switch which outputs the digital signal of the latch type comparator under the control of the pixel select signal,

wherein the digital signal is a digital signal having a 1-bit structure.

2. (Canceled)

3. (Canceled)

4. (Currently amended) The image sensor as claimed in claim 1, wherein the analog signal of the photocell of the adjacent pixel reference signal is a reference voltage.

5. (Original) The image sensor as claimed in claim 1, wherein the photocell is a photo diode that generates a photocurrent corresponding to the received quantity of light.

6. (Currently amended) The image sensor as claimed in claim 1, wherein the latch type comparator outputs a first signal when the analog signal of the photocell is greater than the ~~analog signal of the photocell of the adjacent pixel~~ reference signal and outputs a second signal when the analog signal of the photocell is less than the ~~analog signal of the photocell of the adjacent pixel~~ reference signal.

7-14. (Canceled)

15. (Currently amended) An optical pointing system comprising:

a) a plurality of pixels, each having

a photocell which receives light and generates an analog signal corresponding to a quantity of the received light,[[and]]

a latch type comparator which compares the analog signal of the photocell and an analog signal of a photocell of an adjacent pixel and generates a digital signal having a value of the compared result, and

a switch which outputs the digital signal of the latch type comparator under the control of the pixel select signal;

b) an image processor which calculates a movement value using the digital signals outputted from the plurality of pixels and generates a pixel select signal and a shutter control information signal; and

c) a shutter control circuit which generates a shutter control signal corresponding to the shutter control information signal of the image processor,

wherein the digital signal is a digital signal having a 1-bit structure.

16-19. (Canceled)